

Notice of Allowability

Application No.

10/688,908

Examiner

Ruth C. Rodriguez

Applicant(s)

SAKABAYASHI, TOSHIKI

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed on 19 October 2005.
2. ☒ The allowed claim(s) is/are 12-15 and 17-25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
- ☐ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

1. For claim 12, Pozzoban discloses a shoestring tying apparatus comprises a fastening member, a rotational member, a fitting portion and a driving mechanism. The fastening member tightens a shoestring. The fastening member includes a disk connected to one end of the shoestring and an operating member rotates the disk so as to wind the shoestring. The rotational member engages the fastening member and rotates the operating member of the fastening member in a winding direction so as to wind the shoestring around the disk when the rotational member is rotated in a predetermined direction to thereby tighten the shoestring. The rotational member engages the fastening member and prevents rotation of the operating member of the fastening member in a direction opposite the winding direction when rotation of the rotational member is stopped, thereby maintaining tension of the shoestring. The rotational member disengages the fastening member to allow rotation of the operating member of the fastening member in the direction opposite the winding direction to

thereby releasing the tension of the shoestring. The fitting portion connects the rotational member to the operating member of the fastening member. The driving mechanism rotates the rotational member in the predetermined direction. The driving mechanism manually or automatically rotates the operating member via the rotational member so as to rotate the disk of the fastening member to thereby tightening the shoestring. The driving mechanism includes a spring member such that as the rotational member is rotated in the predetermined direction the spring member is wound. The driving mechanism disclosed by Pozzoban is a knob. Pozzoban fails to disclose that the driving mechanism further comprises a cylindrical storage member, an elastic member, an operating cord and a restricting device. Accordingly, it would not have been obvious to one having ordinary skill in the art at the time the invention was made to add a driving mechanism for a cylindrical storage member, an elastic member, an operating cord and a restricting device replace the knob disclosed by Pozzoban as the driving mechanism for a cylindrical storage member, an elastic member, an operating cord and a restricting device.

2. Regarding claim 17, Morell discloses a shoestring tying apparatus comprising a fastening member, a rotational member, a fitting portion and a driving mechanism. The fastening member tightens a shoestring. The fastening member includes a disk connected to one end of the shoestring and an operating member rotates the disk so as to wind the shoestring. The rotational member engages the fastening member and rotates the operating member of the fastening member in a winding direction so as to wind the shoestring around the disk when the rotational member is rotated in a

predetermined direction to thereby tighten the shoestring. The rotational member engages the fastening member and prevents rotation of the operating member of the fastening member in a direction opposite the winding direction when rotation of the rotational member is stopped, thereby maintaining tension of the shoestring. The rotational member disengages the fastening member to allow rotation of the operating member of the fastening member in the direction opposite the winding direction to thereby releasing the tension of the shoestring. The fitting portion connects the rotational member to the operating member of the fastening member. The driving mechanism rotates the rotational member in the predetermined direction. The driving mechanism manually or automatically rotates the operating member via the rotational member so as to rotate the disk of the fastening member to thereby tightening the shoestring. The rotational member includes a cylindrical portion and a rotational shaft with an elastic member in the cylindrical portion and a two-piece cover member.

However, Morell fails to disclose that the shoestring tying apparatus further comprises a ratchet in the cylinder portion, an operating cord to be wound on the cylinder portion, that the elastic member has a first end fixed to the rotating shaft of the rotational member and that the cover member stores the operating cord. Consequently, it would not have been obvious to one having ordinary skill in the art at the time of applicant's invention to modify the apparatus disclosed by Morell with a ratchet in the cylinder portion, an operating cord to be wound on the cylinder portion, having the elastic member with a first end fixed to the rotating shaft of the rotational member and having the cover member stores the operating cord.

3. For claim 19, the same reasons of allowance of claim 17 apply to claim 19 that also claims a plurality of pawls, the ratchet that has pawl-storage sections and a spring storage member that are not disclosed by Morell. As a result, it would not have been obvious to one having ordinary skill in the art at the time the invention was made to have the shoestring tying apparatus having the features disclosed by Morell with a plurality of pawls, the ratchet that has pawl-storage sections and a spring storage member in addition to the features missing from Morell as defined by claim 17.

4. Regarding claim 24, the same reasons for allowance of claim 17 apply to claim 24 since Morell discloses that the rotational member includes an internal gear. However, Morell fails to disclose that the rotational member has an engaging gear, the operating member has a plurality of pawls, a cylindrical engaging gear and a gear set, a ratchet engaging the gear set and an operating cord. As a result it would not have been obvious to one having ordinary skill in the art at the time of applicant's invention to have the rotational member with an engaging gear, the operating member with a plurality of pawls, a cylindrical engaging gear and a gear set, a ratchet engaging the gear set and an operating cord.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Baggio et al. (US 4,799,297), Bidoia (US 4,961,544) and Schoch (US 5,042,177) are cited to show state of the art with respect to shoestring tying apparatus having some of the features being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.


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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

RCR
rcr

November 4, 2005


ROBERT J. SANDY
PRIMARY EXAMINER